INPUTS IN PRIMARY SCHOOLS WITH DIFFERENT LEVELS OF CONCENTRATION OF SCHEDULED CASTE STUDENTS

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PREFACE

Baseline Assessment Study was carried out to provide an empirical basis for designing suitable intervention strategies for the qualitative and quantitative improvement of primary education. The present study is based on the micro analysis of the Baseline Assessment data. It focuses on scheduled caste - a socially disadvantaged segment of population in Indian caste hierarchy. In the present study an attempt has been made to explore the available school input facilities to scheduled caste students according to their density within schools. Schools were classified in to four groups in terms of their different levels of concentration.

I hope the results obtained from this study will be helpful in planning the necessary intervention strategies in the respective states. The input facilities requiring intervention differ from state to state. Though few input facilities are identified but these can not be neglected considering the qualitative improvement in primary education.

I am highly grateful to Prof. N.K. Jangira who initiated this study and provided valuable suggestion from time to time till the completion. My colleague, specially Anupam Ahuja and Dr.Neeru Bala Senior Project Associate of DPSEE helped me in discussion and finalising this report. I am highly thankful to them.

To complete this report Prof. N.K. Ambasht was kind enough to provide me computer facilities at the time of dire need. I pay my regards to him.

I am also equally grateful to Marlene Lockheed for her valuable suggestions on the draft report of the study.

At the end I express my sincere gratitude to Prof. A.K. Sharma, Director, Prof. A.N. Maheshwari, Joint Director and Shri. R.S. Pandey, Secretary NCERT for providing full institutional support for the completion of the study.

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LIST OF ACRONYMS

OB : Operation Black Board

SC : Scheduled Caste

SC : Scheduled Caste

SCI : SC Concentration Index

K-W ANOVA : Kruskal-Wallis One Way Analysis of Variance

M-W U : Mann-Whitney U test

ICDS : Integrated Child Development Scheme

DPEP : District Primary Education Programme

MHRD : Ministry of Human Resource Development

ECCE : Eearly Childhood Care and Education

NGO : Non-Governmental Organisation

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EXECUTIVE SUMMARY

The study sought to answer the question: Do inputs in primary schools with different levels of concentration of SC students differ? The SC concentration index for schools (SCI) was developed On the basis of percentage of SC students enrollment four groups were formed. The enrollment of 75-100 percent formed the school with high concentration. Similarly average and low groups were formed with a class interval of 25 in descending order. The enrollment up to 24 percent of SC students and schools without SC students were merged in one group. For this minor percentage of enrollment (1-24%) no separate group was constituted because the existing input facilities in the school cater to the needs of both non SC and SC students and they are functionally integrated

The input variables included physical facilities and services like safe drinking water and toilets; coverage by OB scheme and instructional aids; availability of preschools and incentives, teacher quality, teaching patterns; and school health facilities.

Salient Findings

A. Physical Facilities and Services

1. The schools with different concentration of SC students did not differ significantly in possessing own building. However, in Assam and Orissa, schools with high and average concentration of SC students had significantly less pucca building.

2 In Madhya Pradesh, the schools under no SC category had significantly less furniture and equipments than other three categories.

3 The availability of playground and safe drinking water facilities did not differ significantly among the groups under study in any of the state.

4 Toilet facilities were available in few schools. In Assam, schools with high and average concentration category had no toilet facilities, and was significantly less in schools under no SC groups

B. OB Scheme and Instructional Aids

5. No significant difference was observed in four categories of schools covered under OB Scheme in any of the state under study.

6. Schools with average concentration of SC students in Maharashtra and high concentration in Tamilnadu had significantly less instructional aids. In Haryana, the schools under high concentration category had more instructional aids than schools under no SC groups

C. Preschool and Pupil Incentive

7. There were very few schools with preschool facility in all the states under study, except Haryana. Only significant difference was found in Assam, where schools under high concentration category had no preschool facility

8. The schools with different concentration of SC students did not differ significantly on pupil incentive scheme.

D. Teacher Quality

9. In terms of teacher qualification schools under different concentration level of SC students did not differ significantly among themselves.

10. In Maharashtra, schools with average concentration of SC students had less percentage of trained teachers. In Orissa and Maharashtra, teachers working in schools under high concentration category had less teaching experience than other three categories. In Haryana, the trend was reverse.

11. Percentage of teachers involved in multigrade teaching was higher in schools of no SC group than other three categories.

12. Teacher pupil ratio was significantly higher in schools of high concentration category in Madhya Pradesh and average concentration category in Maharashtra.

13. In Haryana less percentage of students in schools of average concentration category responded positively about the regular presence of teachers in the classroom

E. Instructional Time Use

14. In Madhya Pradesh, teachers in schools of high concentration category provided more time for group learning than other three categories.

F. Use of Textbooks

15. In Maharashtra and Haryana, use of textbook for home work purpose was significantly less than the schools of average and high concentration group respectively.

Conclusion

Intervention strategies need to focus on improvement of physical facilities (building, furniture and equipment), effective use of OB scheme, supply of instructional aids and improvement of teacher quality. Priority may be given on inservice training. Rationalisation of teacher pupil ratio is required specially in Madhya Pradesh and Maharashtra. Preschool facility may be extended to all the categories of schools under study.

INPUTS IN PRIMARY SCHOOLS WITH DIFFERENT LEVELS OF CONCENTRATION OF SCHEDULED CASTE STUDENTS

Context and Focus

Scheduled Casts(SC) constitute socially disadvantaged segment of population in caste hierarchy in India. The population is scattered all over the country. The concentration varies from location to location According the Census, 1991, the overall SC population was 139 million and it was 17 percent of the total population. It ranges between 4.4 in Wayanad to 27 12 percent in South Arcot in DPEP districts The total percentage of SC population of selected DPEP districts are presented in Annexure-1.

Partially universal scatter of SC population implies that school provision in a particular location caters to their education too as segregation is constitutionally illegal. It is partially true in rural areas where only one school serves the whole community. Logically, school inputs are the same for all children.

There is a substantial increment in the enrollment of SC children at Primary stage in 1992 in comparison to 1981 (MHRD,P.117, 1993). Though the dropout rate is declining from 1981 but it is still higher. Many reasons may be attributed to this high drop out rate, however, a pertinent question related to the quality of education provided which is based on the adequate input facilities

On the basis of Baseline Assessment Study, the learning achievement levels of SC students in reading and mathematics at primary schools are lower than that of the students belonging to OBC and other castes. The achievement mean score of SC students varied from 8 to 21 in reading and word meaning where as it was 6 to 26 in mathematics (Jangira & others, 1994). These findings raise a question about the assumption of equality of inputs in schools. Do schools with high and low concentration of students belonging to SC differ in school inputs ? The question is relevant since it has policy implications for resource allocation at micro level in DPEP districts from the point of view of social justice.

Coverage

Micro analysis of baseline assessment study on learning achievement conducted in DPEP districts was carried out to investigate the status of inputs in primary schools with different levels of concentration of SC students. The total percentage of SC enrollment in primary schools of respective states were calculated to find out their concentration level in the schools selected for investigation. Fig. 1 exhibits highest percentage of SC enrollment in Haryana where as it is lowest in Kerala. The number of districts, schools covered and the total percentage of SC enrollment in the state

Total Percentage of SC Enrollment
in Primary Schools

Fig. 1

Percentage

Value	State
11.77	ASSAM
20.57	HARYANA
11.09	KERALA
13.01	MADHYA
15.02	MAHA
18.79	ORISSA
19.85	TAMIL

STATE
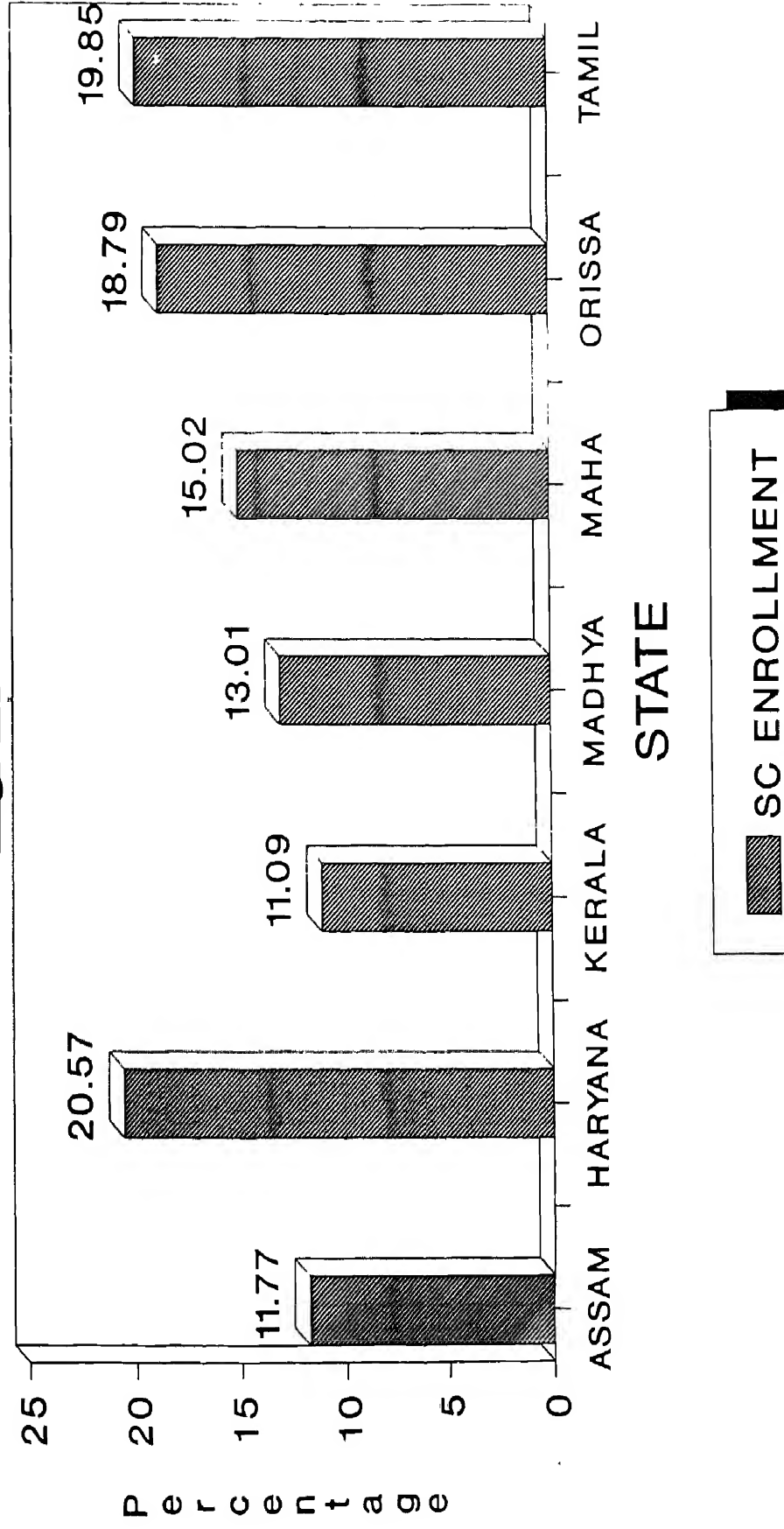
SC ENROLLMENT

Table 1: Number of Districts, Schools and Enrollment (%) in States			
State	*Total % of Enrollment	Number of Districts	Number of Schools
Assam	11.77	4	161
Haryana	20.57	4	145
Kerala	11.09	3	113
Madhya Pradesh	13.01	19	808
Maharashtra	15.02	3	135
Orissa	18.79	4	165
Tamil Nadu	19.85	3	120
Total		40	1647

*Source: Selected Educational Statistics on Sept. 1993 (Studies in Educational Statistics No. 5) MHRD, 1994.

Variables

The variables involved in the study are SC Concentration Index and school inputs. The school inputs were broadly classified in to five categories. The school building and services covered ownership of the building, type of building, additional requirement of classroom, availability of playground, safe drinking water, toilet facilities, furniture and equipment. The coverage of the school by OB scheme and instructional aids also form a component of the physical facilities. Preschool and incentive schemes to children were also covered. Another significant category relates to teacher quality which covers education and professional training of teachers, initial training, inservice training and teaching experience. Multigrade teaching, teacher attendance and teacher pupil ratio also fall in this category Teaching patterns constitute another dimension of inputs to schooling. It covers time for teaching, time for talking with pupils, group learning practice, home work, opportunity to read aloud and the use of textbooks. Health facilities include availability of first aid kits, provision of health check-up and immunization. The variables along with variable description and statistics used are summarised in Table 2

Table 2: Variables Covered in the Study			
Variables Name	Code	Variable Description	Statistics Used
School Building And Services			
Building	BDGO	% Own Building	Chi-Square
Pucca Building	BDGPC	% Building	-do-
Additional Classroom	ADCL	Numbers of Classroom	K-W ANOVA
Furniture and Equipments (Total 9 items)	FEQT	Numbers of FEQT available	-do-
Play Ground	PLG	% schools having playground	Chi-square
Safe Drinking Water	SDW	% schools having sdw facilities	-do-
Toilet	TLT	% schools having TLT facilities	-do-
OB coverage			
OB Scheme	OB	% of schools covered by OB	-do-
Instructional Aids	INAD	Numbers of INAD available	K-W ANOVA
Pre-school and Incentives			
Pre-school Facility	PSC	% of schools having PSC facilities	Chi-square
Pupil Incentive	PINC	% of schools having PINC	-do-

Variables Name	Code	Variable Description	Statistics Used
Table 2: Variables Covered in the Study			
Teacher Quality			
Academic Qualification	AQUAL	8th = 1, Matric = 2, H S = 3, Grad = 4, PG = 5	K-W ANOVA
Below Class 10	BLX	Mean % of BLX	K-W ANOVA
Initial Training	INTR	Mean % of INTR	K-W ANOVA
Inservice Training	INSET	Number of Days	K-W ANOVA
Teaching Experience	TEXP	Numbers of Years	K-W ANOVA
Multigrade Teaching	MGT	% of Teachers adopt MGT	K-W ANOVA
Teacher Attendance	TAT	Always = 1, Max.time = 2, Som Time = 3, Very Few = 4	K-W ANOVA
Teacher Pupil Ratio	TPR	Ratio	K-W ANOVA
Teaching Pattern			
Total Hours Devoted to Teaching	HRT	Hours	K-W ANOVA
Time for Talking With Pupil	TLK	Minutes	K-W ANOVA
Time for Group Learning	GRL	Minutes	K-W ANOVA
Time for Practice	PRACT	Minutes	K-W ANOVA
Time for Home Work correction and Feedback	HCRT	Minutes	K-W ANOVA
Home Work Given	HWG	Regularly = 1, Sometime = 2, Not at all = 3	K-W ANOVA
Teacher Read Textbook	TXTR	Mean Yes	K-W ANOVA
Child Read Aloud	CHR	Mean Yes	K-W ANOVA
Child Self Read	CHRS	Mean Yes	K-W ANOVA
Textbook Home Work	HTXT	Mean Yes	K-W ANOVA

SC Concentration Index (SCI)

An index indicating the concentration level of SC students in primary schools was constructed. Percentage of SC students in each school was worked out and frequency distribution for each state was examined. Schools having 75-100 percent enrollment of SC students was considered as the high concentration group. The enrollment of 50-74 and 25 to 49 percent were categorised in to average and low concentration group respectively. High and average groups were the major focus of this study

because these schools may be equipped with more facilities due to various beneficial programmes launched by Ministry of Social and Human Resource Development. The fourth category consist of 0-24 percentage of enrollment where percentage of schools without any SC students were mentioned Formation of a separate level for this percentage (1-24%) of SC children may not be meaningful as they are functionally integrated with other students in the school system. The percentage of schools fall under each category is presented in Fig. 2. The same procedure was applied to each of the states The description of schools in different categories is given in Table 3

Table: 3 Numbers of Schools in Each Category

State	High Concentration (75-100%)	Average Concentration (50-74%)	Low Concentration (25-49%)	No SC (0-24%)	Total**
Assam	3	4	7	145 *(79.31)	159
Haryana	5	15	44	74	138
Kerala	0	0	2	111 (12.61)	113
Madhya Pradesh	9	23	131	597 (19.8)	760
Maharashtra	2	8	29	87 (14.9)	126
Orissa	7	9	35	113 (22.12)	164
Tamil Nadu	7	12	21	73 (37)	113
Total	33	71	269	1200	1573

* Paranthesis value shows the percentage of schools not having SC students
** Missing cases are excluded

Statistical Analysis

The distribution of SC enrollment percentage in each sate indicated a negative skewed distribution. Therefore Non Parametric statistics were used for studying the significance of difference between the levels of inputs in schools in the four categories. For the variables with dichotomous response like ownership of school building, pucca and other buildings, etc. Chi-Square was used. For variables which had continuous scores achieved through aggregation of items or scaling Kruskal-Wallis one way analysis of variance (K-W ANOVA) was used. In this statistics each observation is replaced by ranks The lowest value is replaced with rank 1, and the highest value with total number of cases in the observation. To test the significance of difference group mean ranks are compared by obtaining a Chi-square value. However, in the tabular presentation mean and SD of respective variables are presented

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Percentage of Schools in Different Categories
of SC Concentration
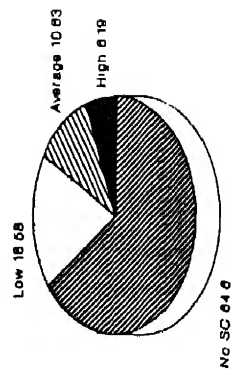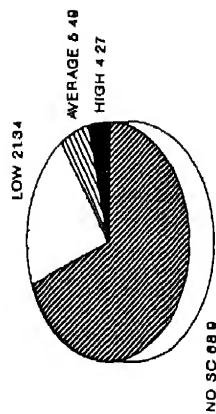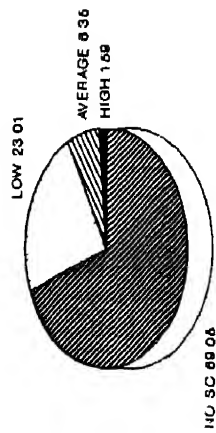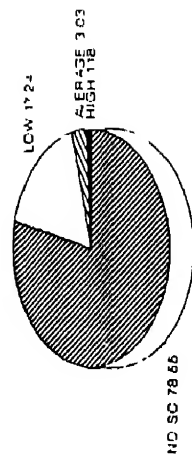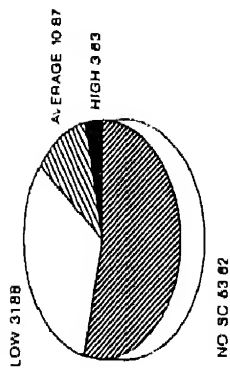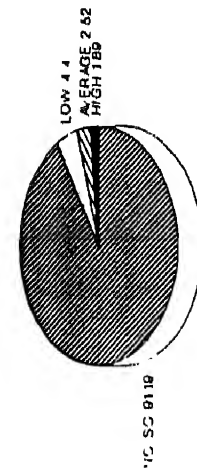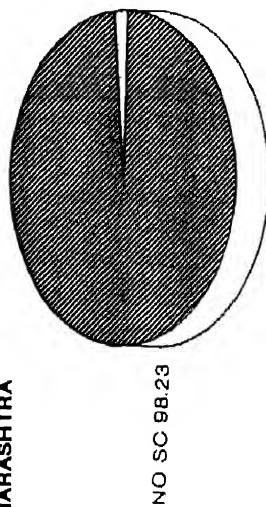
Fig. 2

in place of mean ranks for meaningful interpretation. Only Chi-square value obtained from K-W ANOVA with its probability level are mentioned against the mean and SD Mann-Whitney U test was applied to find out significance of difference between different pairs of means. The power-efficiency of these two tests are 95.5 percent when compared to F and t-test respectively (Siegel,1956).

Results

School Building

Table 4 gives percentage of schools having own building and those having pucca building in the four categories of primary schools. The Table indicates no significant difference in the ownership of buildings in any of the states. The percentage of schools having pucca building differ significantly among the four categories only in the states of Assam and Orissa. In both the states chi-square value was significant at 04 and .02 level respectively. In Assam the percentage of schools with low concentration of SC students had significantly higher pucca building facilities than other three categories Specifically in high and average concentration category 38 and 46 percent of schools were lacking pucca building facilities in comparison to low concentration category (Fig.3) Even the schools under no SC group also had significantly less pucca building facilities. In Orissa the difference was in reverse direction In this state schools under no SC group had more pucca building than low concentration category. The schools with high and average concentration of SC students deprived of pucca building facilities. This imbalance in the state of Assam and Orissa requires attention in resource allocation in the district plans

State	School Facility	Percentage of Schools Having the Facility				Chi-Square	P-Value
		High Conc.	Average Conc.	Low Conc	No SC		
Assam	Building	100	100	100	92.4	1.41	0.77
	Pucca Buiilding	33.3	25.0	71.4	22.8	8.51	0.04*
Haryana	Building	100	66.7	84.1	89.2	6.02	0.11
	Pucca Buiilding	80.0	73.3	68.2	83.8	4.04	0.26
Kerala	Building	N.A	N.A	50.0	82.0	1.33	0.25
	Pucca Buiilding	N.A	N.A	100	82.9	0.41	0.52
Madhya Pradesh	Building	88.9	91.3	87.0	86.6	0.47	0.92
	Pucca Buiilding	66.7	87.0	84.7	76.0	6.46	0.09
Mahara shtra	Building	100	62.5	75.9	86.2	4.36	0.22
	Pucca Buiilding	00	00	17.2	32.2	6.37	0.09
Orissa	Building	100	88.9	97.1	96.5	1.75	0.62
	Pucca Buiilding	00	00	28.6	38.9	10.0	0.02*
Tamil Nadu	Building	85.7	100	95.2	95.9	2.19	0.53
	Pucca Buiilding	71.4	25.0	23.8	31.5	5.94	0.11

Table 4: School Building

Schools Having Building Facilities

Fig. 3

Own Building
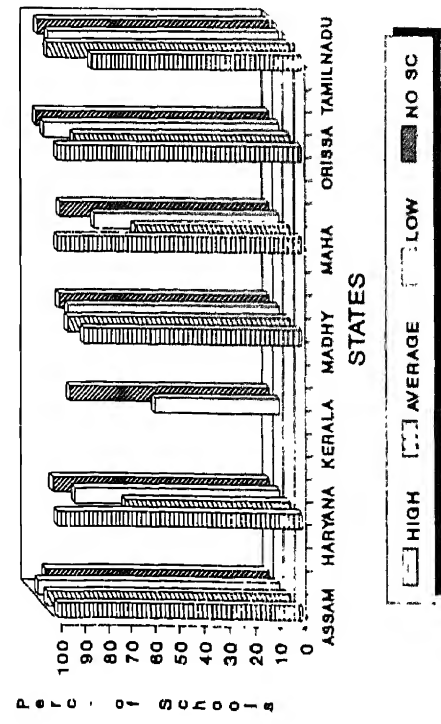
Pucca Building
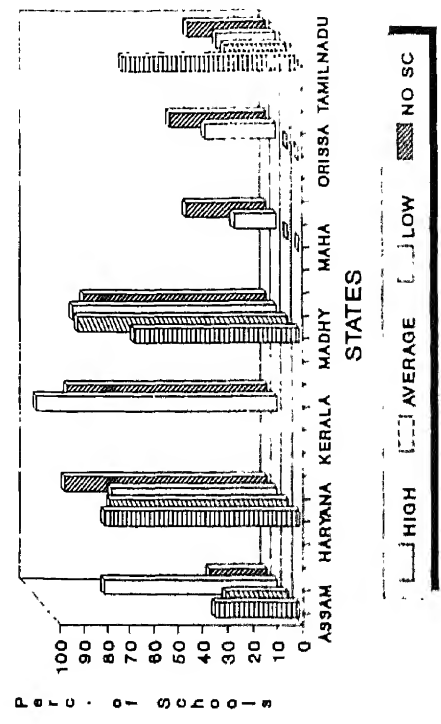
Additional Classrooms and Furniture

Table 5 provides information about the requirement of additional classrooms, furniture and equipment The furniture and equipment covered nine items:teacher table, chair, blackboard, chalk and duster, pin-up black board, water pitcher, dustbin and mats for sitting children. The 'yes' scores were aggregated for the schools K-W one way analysis of variance and M-W U test was carried out to find significance of difference among the means as well as between pairs of means.

The table reveals no significant difference among means of additional classroom requirement in any of the states. It implies that there is a requirement of extra classrooms irrespective of schools with different level of SC students concentration. The range of average availability of equipment and furniture was lowest (3.60) in Kerala and highest (6 84) in Haryana. There is a shortfall in the items of furniture and equipments in all states but among the four groups of schools the difference was not significant in any of the states. Only through paired comparison of mean score significant difference ($Z=-2.03$, $P<.04$) was found between average and no SC category in Madhya Pradesh. In this respect furniture and equipments were available in schools with average concentration of SC students than no SC category

State	School Facility	Mean, Standard Deviation of the Facilities								Chi-Square	P-Value
		High conc		Average Conc		Low Conc		No SC			
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S D		
Assam	Additional Classroom	3.33	2.31	3.25	1.89	2.00	1.29	2.38	1.54	1.52	0.68
	Furniture and Equipments	4.67	0.58	4.25	2 22	4.43	1.99	3.96	1.76	1.17	0.76
Haryana	Additional Classroom	1 60	1.34	2.00	1.65	2.61	1.78	2.33	2.15	2.26	0.52
	Furniture and Equipments	6.80	1.79	6.60	1.80	6.72	1.44	6.84	1.46	0.31	0.96
Kerala	Additional Classroom	N.A	N.A	N.A	N.A	1.50	0.70	2.63	2.60	0.17	0.68
	Furniture and Equipments	N.A	N.A	N.A	N.A	4.50	0.70	3.60	1.75	0.48	0 49
Madhya Pradesh	Additional Classroom	2.67	1.73	2.22	1.59	2.55	1.79	2.44	1.85	1.12	0.77
	Furniture and Equipments	5.44	1.74	5 65	2.10	5 72	2.32	4.81	2.22	5.05	0 16
Maharashtra	Additional Classroom	2.00	1.41	1.50	1.51	1.52	1.24	2.05	1.35	4.02	0.26
	Furniture and Equipments	4.50	0.71	4.87	1.64	5.34	1.56	5.00	1.93	2.24	0.52
Orissa	Additional Classroom	1.43	1.13	1 89	1.61	2.60	1.42	2.60	1.62	5.70	0.13
	Furniture and Equipments	6.43	1.27	5.78	1.20	5.51	1.90	5.94	1.99	2.32	0.53
Tamilnadu	Additional Classroom	2.43	1.27	1.33	1.49	2.67	1.56	2.07	1.30	7 04	0.07
	Furniture and Equipments	4 71	2.93	6.66	0.88	5.57	2 25	6.33	2.33	4.92	0.18

Table 5: Classrooms, Furniture and Equipment

Playground, Drinking Water and Toilet

Table 6 provides information regarding the availability of playground, drinking water and toile facilities in different categories of schools. The percentage of schools having these facilities was worked out

State	School Facility	Percentage of Schools Having the Facility				Chi-Square	P-Value
		High Conc.	Average Conc.	Low Conc	No SC		
Assam	Playground	33.3	50.0	26.8	44.8	0.91	0.82
	Safe Drinking Water	33.3	00	28.6	21.4	1.56	0.67
	Toilet	0	00	42.9	9.0	9.29	0.03*
Haryana	Playground	00	20.0	31.8	27.0	2.75	0.43
	Safe Drinking Water	80.0	60.0	68.2	82.4	5.18	0.16
	Toilet	80.0	60.0	54.5	55.4	1.30	0.73
Kerala	Playground	N.A	N.A	50.0	47.7	0.03	0.94
	Safe Drinking Water	N.A	N.A	50.0	64.9	0.19	0.66
	Toilet	N.A	N.A	100	64.0	1.11	0.29
Madhya Pradesh	Playground	44.4	30.4	37.4	36.3	0.66	0.88
	Safe Drinking Water	33.3	43.5	30.5	36.3	2.25	0.52
	Toilet	00	13.0	15.3	16.8	2.13	0.55
Maharashtra	Playground	100	25.0	58.6	39.9	7.51	0.06
	Safe Drinking Water	00	25.0	27.6	35.6	1.87	0.59
	Toilet	00	25.0	13.8	17.2	0.99	0.80
Orissa	Playground	00	22.2	17.1	18.6	1.70	0.64
	Safe Drinking Water	14.3	44.4	25.7	24.8	2.19	0.53
	Toilet	00	00	2.9	9.7	3.26	0.35
Tamil Nadu	Playground	71.4	50.0	33.3	46.6	3.26	0.35
	Safe Drinking Water	28.6	41.7	57.1	68.5	6.84	0.08
	Toilet	28.6	00	4.8	8.2	5.39	0.14

Table 6: Playground, Drinking water and Toilet

Although the facilities were quite limited among the four groups of schools in all states except Kerala the difference in the availability of playground and safe drinking water was not significant. The toilet facilities were very limited in all the states except in Kerala but the difference among the four categories of schools was significant only in the states of Assam (Fig 4). The schools with high and average concentration of SC students had no toilet facilities in comparison to other two categories. In fact only 29 and 21 percent of schools under low concentration and no SC group had toilet facilities respectively.

OB Scheme and Instructional Aids

Percentage of schools covered by OB schemes in the DPEP districts was computed. Chi-square was used for finding the significance of difference in the average percentages among the four groups. The availability of the 12 instructional aids: maps, globes, charts, toys, games kit, science kit, mini tool kit, maths kit, reference book, children books, magazines and musical instruments, were aggregated with score of one for each set of items. The means and standard deviation are given in Table 7. K-W one way ANOVA was used to find significance of difference among means.

		Table 7: OB Scheme and Instructional Aids									
State	School Facility	Mean, Standard Deviation or Percentage of Schools Having the Facilities								Chi-Square	P-Value
		High conc		Average Conc		Low Conc		No SC			
		Mean	S.D	Mean	S D	Mean	S.D	Mean	S D		
Assam	OB Scheme	66.7	--	50.0	--	42.9	--	45.5	--	0.58	0.90
	Instructional Aids	3.33	3.21	2.75	3.77	3.57	2.93	2.99	3.24	0.82	0.84
Haryana	OB Scheme	100	--	80.0	---	72.7	--	70.3	--	2.51	0.47
	Instructional Aids	9.60	0.89	7.33	3.01	7.39	3.03	6.66	2.98	6.15	0.10
Kerala	OB Scheme	N.A	N.A	N.A	N.A	100	--	46.8	--	2.22	0.13
	Instructional Aids	N.A	N.A	N.A	N.A	8.00	2.82	6.21	3.51	0.43	0.51
Madhya Pradesh	OB Scheme	55.6	--	60.9	--	55.7	--	56.6	--	0.21	0 97
	Instructional Aids	6.11	4.01	6.17	4.34	5.33	4.36	5.64	4.19	1.21	0.75
Maha-rashtra	OB Scheme	100	--	62.5	--	75.9	--	70.1	--	1.46	0.69
	Instructional Aids	3.00	00	4.37	3.29	6.10	3.18	6.86	3.19	7.33	0.06
Orissa	OB Scheme	85.7	--	88.9	--	82.9	--	81.4	--	0.39	0 94
	Instructional Aids	9.43	4.19	9.00	2.12	8.17	3.49	8 43	3.35	3.14	0 37
Tamil-nadu	OB Scheme	57.1	--	91.7	--	81.0	--	80.8	--	3.39	0 33
	Instructional Aids	7.71	3.54	10.6	1.24	9.52	3.44	9.37	3 71	4.24	0.24

Playground, Drinking Water and
Toilet Facilities Available

Playground

Drinking Water

Toilet Facilities

Fig. 4

11A
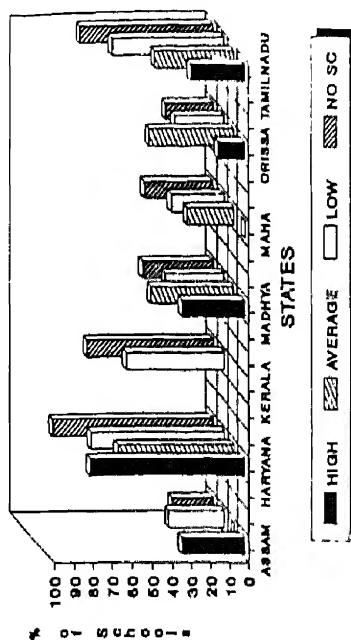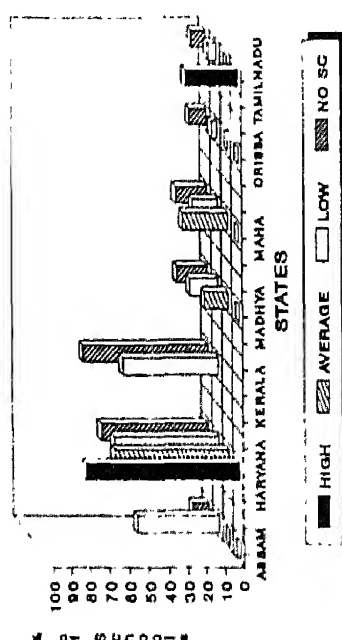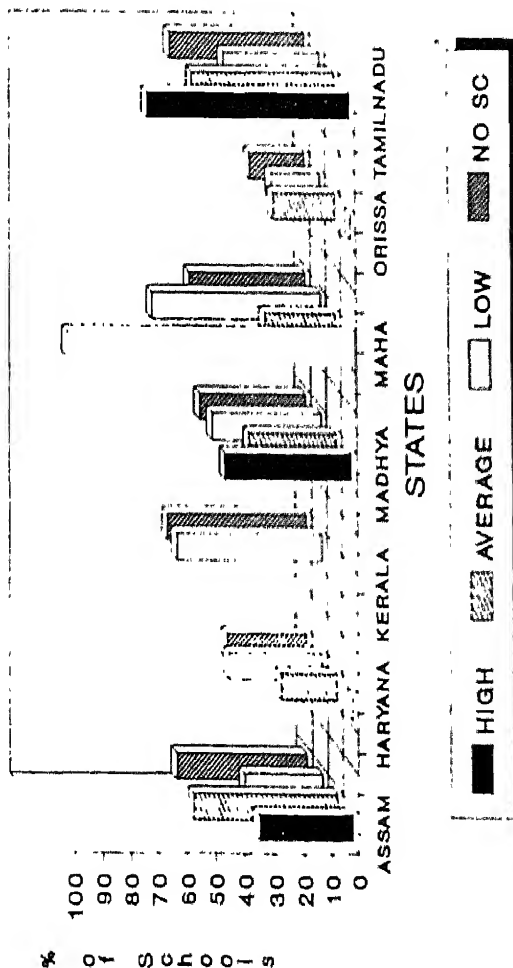
The difference in the inputs in terms of OB scheme and instructional aids was not significant in any of the states. When two groups were compared through M-W U test schools with average concentration of SC students in Maharashtra (Z=-1.95, P<.05) had less number of furniture and equipments than schools under no SC group (Fig.5). In Tamilnadu, schools under high concentration category equipped with less furniture and equipment than no SC category (Z=-1.93, P<.05). The reverse trend was found in the states of Haryana (Z=-2.21, P<.03). In Tamilnadu it may be because of less number of schools covered under OB schemes (57%) in comparison to no SC group (81%). Same fact may be possible in the state of Maharashtra. Necessary provision may be made in this regard.

Preschool and Incentives

The table 8 indicates the availability of preschooling facilities and incentives in primary schools in different states. Preschool facilities were very limited in all the states and difference among the schools with different concentration level of SC student was found significant only for Assam. In this state school with high concentration of SC students had no preschool facilities where as 50 and 43 percent of school in average and low category were provided with this facility. It was also significantly less in school s under no SC category. Percentage of schools covered under incentive scheme varies from 20 to 100 in all four categories. The causes for this wide gap may differ from state to state. It needs further investigation and intervention. Specially in Haryana this provision was quite less in all the four categories. The difference among different categories of schools were not significant in any state.

Table	8:	Preschool	Facility	and	Pupil	Incentives		
State	School Facility	Percentage	of	Schools	Having	the	Facility	
		High Conc	Average Conc.	Low Conc	No SC	Chi-Square	P-Value	
Assam	Preschool Facility	00	50 0	42.9	13.1	8.99	0.03*	
	Pupil Incentives	100	100	85.7	85.5	1.18	0.76	
Haryana	Preschool Facility	80.0	93.3	90.9	85.1	1.58	0.66	
	Pupil Incentives	20.0	26.7	11.4	28.4	4.77	0.19	
Kerala	Preschool Facility	N.A	N.A	00	1.8	0.04	0.85	
	Pupil Incentives	N.A	N.A	100	100	--	--	
Madhya Pradesh	Preschool Facility	22 2	13.0	7.6	11.7	3.02	0.38	
	Pupil Incentives	100	100	92.4	94.0	2.64	0.45	
Maharashtra	Preschool Facility	00	37.5	34.5	41.4	1.74	0.62	
	Pupil Incentives	100	75.0	82.8	83.9	0.82	0.84	
Orissa	Preschool Facility	00	11.1	5.7	11.5	1.82	0.61	
	Pupil Incentives	85.7	55.6	82.9	80 5	3.68	0.30	
Tamil Nadu	Preschool Facility	00	8.3	14.3	9 6	1.28	0.73	
	Pupil Incentives	100	100	100	97 3	1.11	0 77	

OB Scheme and Instructional Aids

Fig. 5

Instructional Aids Available

Instructional Aids Available chart — Mean Scores vs Categories of SC Concentration (HIGH, AVERAGE, LOW, NO SC). Legend: ASSAM, ORISSA, KERALA, TAMILNADU, MADHYA, HARYANA, MAHA.

Schools Covered under OB Scheme

Schools Covered under OB Scheme chart — Percentage vs State (ASSAM, HARYANA, KERALA, MADHYA, MAHA, ORISSA, TAMILNADU). Legend: HIGH, AVERAGE, LOW, NO SC.

12A

15A
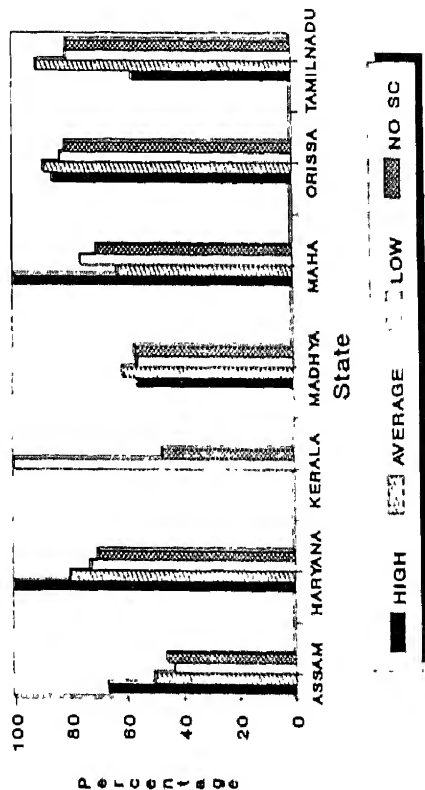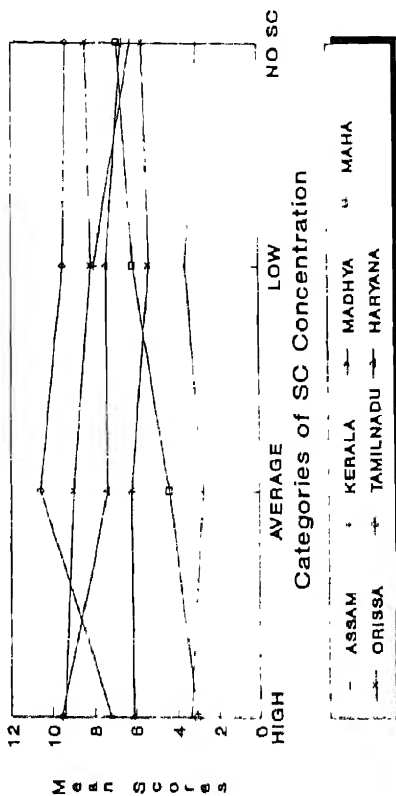
Teacher Quality

Five input measures of teacher quality were studied. Teachers academic qualifications was treated as overall measures ,aggregation of qualification ,ranging from 10 years of schooling to 16 years of education. Each level was given a score of 1. The maximum score for a teacher was 5. The second measure was teachers with below 10 years of schooling. The average for each school was computed and then average for aggregated schools in each category was computed. The results are given in Table 9 The difference was not found significant in any of the states.

State	Items	Mean, SD and Significance Level								Chi-Square	P-Value
		High conc		Average Conc		Low Conc		No SC			
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D		
Assam	Qualification	2.08	0.36	2.25	0.54	1.98	0.72	1.97	0.61	1.63	0.65
	Below Class X	11.11	19.24	12.50	25.0	31.43	47.41	28.41	34.99	1.39	0.71
Haryana	Qualification	2.37	0.34	2.44	0.41	2.29	0.37	2.37	0.48	1.87	0.60
	Below Class X	00	00	00	00	00	00	00	00	00	00
Kerala	Qualification	N.A	N.A	N.A	N.A	2.79	0.77	2.73	0.39	0.01	0.93
	Below Class X	N.A	N.A	N.A	N.A	00	00	0.18	1.89	0.02	0.89
Madhya Pradesh	Qualification	3.05	0.88	3.12	0.82	3.27	0.79	3.27	0.80	2.42	0.49
	Below Class X	00	00	8.33	16.85	5.76	18.50	6.96	18.70	3.58	0.31
Maharashtra	Qualification	3.00	1.41	2.43	0.37	2.58	0.62	2.51	0.64	0.52	0.91
	Below Class X	00	00	4.16	11.78	2.75	7.02	3.69	12.34		
Orissa	Qualification	2.77	0.71	3.26	0.53	2 97	0.63	2.77	0.72	5.45	0.14
	Below Class X	6.43	11.07	3.70	11.11	8.33	16.28	13.41	23.69	2.35	0.50
Tamilnadu	Qualification	2.58	0.82	3.10	0.32	2.95	0.42	2.79	0.49	2.13	0.54
	Below Class X	00	00	1.67	3.33	2.85	7.55	4.81	10.04	1.58	0.66

Table 9: Qualification of Teachers

Professional training experience constituted the second set of variables of teacher quality The first variable indicated whether the teacher received initial training. Number of days of inservice training undergone by the teachers during the last three years formed the second variable. The number of years of teaching was considered as teaching experience variable. Table 10 gives the results

State	Items	Mean, SD and Significance Level								Chi-Square	P-Value
		High conc		Average	Conc.	Low Conc.		No SC			
		Mean	S.D	Mean	S D	Mean	S.D	Mean	S.D		
Assam	Trained	66 66	33.33	81.25	23 93	58.09	36.45	56 40	33.94	2.34	0.50
	Inservice	3.33	2.96	0 93	1 87	3.04	2 62	4.55	6 03	2.79	0.42
	Teaching Exp	11 39	6 83	14.18	9 71	18.10	9 41	15 22	7.36	1.22	0.75
Haryana	Trained	00	00	1.66	6 45	1 51	7.02	3 19	12 46	0.94	0.81
	Inservice	23.97	21 07	12.96	10.55	18 81	13.45	17 91	14 47	2.32	0.51
	Teaching Exp	23.25	3 72	14.02	5.78	17.86	6.74	16 03	7.91	8.31	0.04*
Kerala	Trained	N.A	N.A	N.A	N A	100	00	93 87	12.85	0.53	0 46
	Inservice	N.A	N.A	N.A	N.A	9 17	8.25	15 59	9.57	0.92	0.34
	Teaching Exp	N.A	N.A	N.A	N.A	17.33	4.71	13.91	4.92	1.14	0 28
Madhya Pradesh	Trained	22.22	36.32	32.61	39.07	30.39	34.17.	33 72	38.18	1 29	0 73
	Inservice	20.83	21.65	13.21	16.60	13.39	14.54	12.83	14.64	1 55	0 67
	Teaching Exp	21.05	9 30	16.11	8 46	16 52	8.79	15.86	8.50	2.95	0.39
Maha-rashtra	Trained	50.0	70.71	33.12	35 86	11 55	19 18	8.52	17.29	8.42	0.04*
	Inservice	00	00	24 18	19.44	19.39	15 44	20 38	18.10	4.66	0.20
	Teaching Exp	2 00	00	20.84	8 26	l5 73	7.75	15.75	8 69	8.31	0.04*
Orissa	Trained	25 48	35 57	20 37	21.29	31.71	29.64	34.34	34.26	1.65	0.65
	Inservice	6 41	5.35	7.84	7.58	11.32	13.12	6 35	5.28	3.04	0 38
	Teaching Exp	13.53	4.74	10 34	4 20	15.5	6.54	14.59	6.68	5.36	0.15
Tamil-nadu	Trained	00	00	1 67	5 33	2.85	7 55	6 61	12.39	2 49	0 48
	Inservice	13 83	8 24	18 84	6 70	20.57	5 37	18.34	6.92	1 94	0.58
	Teaching Exp	18.67	3 29	18.60	4 99	20.23	4.34	20.90	5.02	1 16	0.76

14

The difference among means was not significant on any of the variables in any state except Maharashtra. M-W U test revealed that schools with average concentration of SC children had lower mean rank than school of no SC group (Z=-2.66, P < .01) though it appeared more in terms of mean percentage. It is because of small size of the sample. In case of high concentration (2 schools) category only 50 percent of teachers are trained. In respect of teaching experience schools of high concentration category had significantly less experienced teachers (Z=-2.27, P < .02) than no SC category. Also percentage of teachers less than 5 years teaching experience was higher in Maharashtra (Naded) (Jangira, Singh & Yadav, 1994). In Orissa also schools of high concentration category had significantly less experienced teachers than low concentration group (Z=-2.03, P < .04). In Haryana, the result was in reverse direction (Z=-2.06, P < .04). The percentage of schools with high concentration of SC students is the lowest followed by average and low concentration (Fig. 6). It is highest in the schools with no SC concentration. It is a matter of concern which should be a part of district plans in Madhya Pradesh.

Multigrade Teaching, Teacher Pupil Ratio and Teacher Attendance

Result regarding multigrade teaching, teacher attendance and teacher pupil ratio are presented in Table 11. Multigrade teaching was used in this analysis by aggregating the percentage of 'yes' responses of teachers to this item in a school. The mean percentage denotes the magnitude of multigrade teaching adopted in the schools with different concentration level of SC students. It was found significant only in Tamilnadu revealing the fact that less percentage of schools with high concentration of SC students had multigrade teaching. In respect of other states it was not significant but the use of multigrade teaching strategy was common in all the four categories. In Madhya Pradesh teacher pupil ratio is a matter of concern. The schools with high concentration of SC students have the highest teacher pupil ratio followed by low and average group. In Maharashtra the trend was in reverse direction.

Teacher attendance was measured from pupil response about the teacher's presence in the classroom. It did not differ significantly among the four groups in any of the state except Haryana. Fig. 7 demonstrate the wide gap between high and average group on teacher attendance. Less percentage of pupils of average concentration category school reported in favour of teachers' regular presence in the classroom in comparison to the other three categories. This situation invites the attention of supervising authority in that state.

15

Teachers Training and
Teaching Experience

Trained Teachers
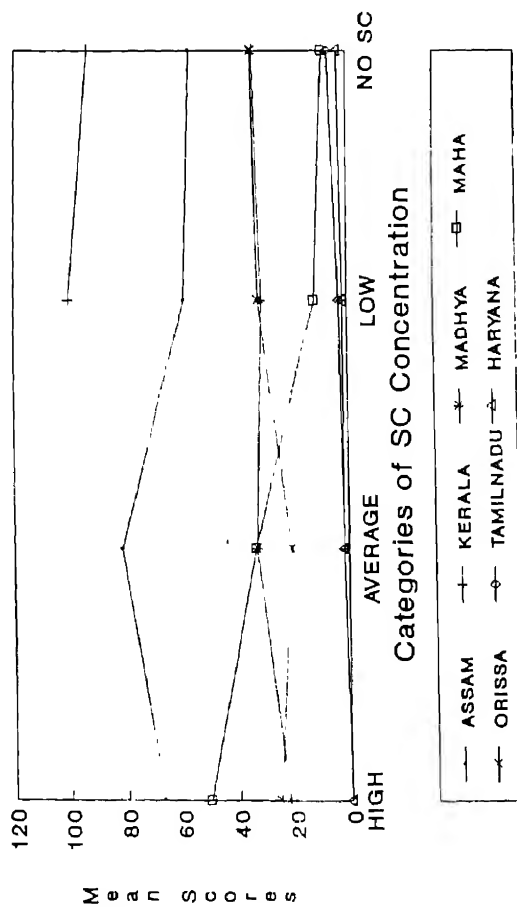
Days of Inservice Training
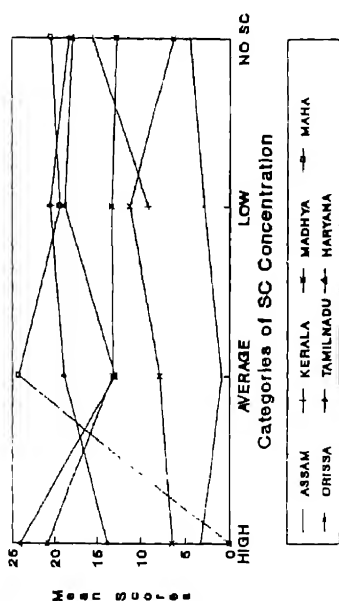
Years of Teaching Experience

Fig. 6

15A

State	Items	High conc		Average Conc.		Low Conc.		No SC		Chi-Square	P. Value
		Mean	S D	Mean	S.D	Mean	S.D	Mean	S.D		
Assam	Multigrade Teaching	44.44	50.92	37.50	73.30	31.43	33.71	60.54	44.12	3.46	0.33
	Teacher Attendance	44.44	33.68	36.46	44.54	56.28	35.26	59.99	42.44	1.18	0.76
	Teacher Pupil Ratio	27.05	10.41	31.61	20.44	40.89	23.36	38.66	20.34	1.69	0.64
Haryana	Multigrade Teaching	56.67	36 51	65.00	46.09	55.61	44.65	62.13	39.98	0.96	0.81
	Teacher Attendance	76.67	43 46	47.74	42.86	63.59	33.87	73.51	39.15	9.41	0.02*
	Teacher Pupil Ratio	42.85	7.47	59.79	47.64	6.49	34.24	66.13	43.46	3.31	0.34
Kerala	Multigrade Teaching	N.A	N.A	N.A	N.A	00	00	1.49	10.08	0.07	0.78
	Teacher Attendance	N.A	N.A	N.A	N.A	62.48	39.59	48.74	30.85	0.26	0.61
	Teacher Pupil Ratio	N.A	N.A	N.A	N.A	30.50	5.30	30.42	10.07	0.01	0.96
Madhya Pradesh	Multigrade Teaching	100	00	87.83	29.57	82.69	30.10	83.62	32.03	4.81	0.18
	Teacher Attendance	61.11	48.59	55.03	47.17	59 53	43.30	60.68	41.42	0.41	0.94
	Teacher Pupil Ratio	65.72	35.40	48.49	20.49	50.02	22.06	46.92	23.24	8.09	0.04*
Maharashtra	Multigrade Teaching	100	00	37 50	41.54	53 79	45.76	62.37	42.98	4.42	0.22
	Teacher Attendance	100	00	77.41	33.40	94.96	7.37	77.86	36.54	3.49	0.32
	Teacher Pupil Ratio	24 25	9 54	51.77	9.61	47.93	23.17	40.94	17.11	10.84	0.01**
Orissa	Multigrade Teaching	81.67	19.51	79.63	32.84	64.19	38.42	69.78	37.33	1.49	0.68
	Teacher Attendance	69.05	41.31	74.39	31.11	72.65	36.68	71.37	34.27	0.55	0.91
	Teacher Pupil Ratio	18.34	6.96	23.36	8.05	28.63	11.00	28.23	14.54	6.05	0.11
Tamilnadu	Multigrade Teaching	25 00	35.35	40.19	40.65	22.90	27.68	60.35	27.15	9 65	0.02*
	Teacher Attendance	93.35	5.48	98 61	2.40	97.68	2.93	92 58	9 24	4 42	0.22
	Teacher Pupil Ratio	43 57	17 99	67.45	40.71	49.70	23.24	59.83	31.17	3.64	0.30

Table 11: Multigrade Teaching, Teacher Attendance and Teacher Pupil Ratio

Mean, SD and Significane Level

Fig. 7

Teacher Attendance

Teacher Pupil Ratio

Categories of SC Concentration

- ASSAM   -+- KERALA   -+- MADHYA   -⊕- MAHA
- ORISSA   -+- TAMILNADU -+- HARYANA

16A
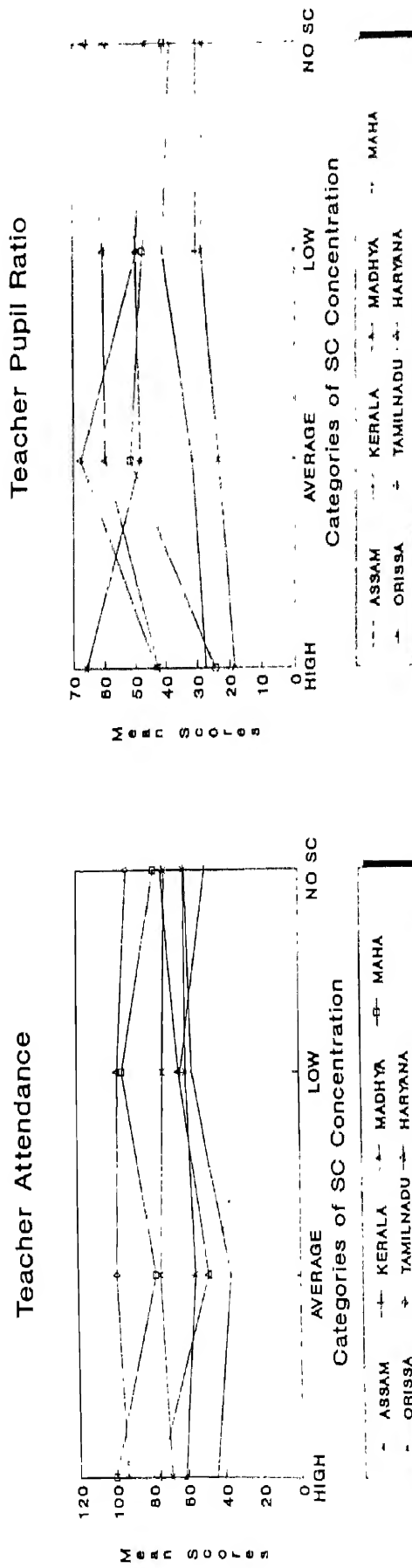
Instruction Time Use

The total instructional time in hours for the year was the first variable. From the each day time schedule the distribution within the classroom for discussion with pupil, group learning, time for practice and time for homework have been calculated in terms of minutes. Further out of total time devoted for teaching in a day, percentage of time given to each activity have been calculated. The results are summarized in Table 12. The data in schools among different categories were not significant in respect of the variable of total time devoted for teaching in any of the state. Only, percentage of time devoted by teacher for group learning was significantly differed in Madhya Pradesh. In this state teachers working in schools of high concentration category provide more time for group learning in comparison to other three categories. It may be because of high percentage of teacher involved in multigrade teaching (Table 11). In case of other teaching input variables no significant difference was obtained in none of the state.

State	Items	High conc.		Average Conc.		Low Conc.		No SC		Chi-Square	P-Value
		Mean	S D	Mean	S.D	Mean	S.D	Mean	S.D		
Assam	Total Hrs Devoted to teaching	923.8	139.9	922.7	129.7	862.6	187.8	930.5	147.2	0.82	0.84
	Time for Discussion with Pupil	22.98	12.23	26.05	17.30	26.42	10.77	26.59	12.58	0.68	0.87
	Time for Group Learning	11.25	1.93	6 77	7.82	8.07	5.25	9.40	6.39	0.80	0.85
	Time for Practice	13.47	5.56	16.22	4.66	18.71	5.73	15.35	6.86	3.76	0.29
	Time for Home Work	15.32	5.22	14 62	2.53	15.19	4.09	14.70	6.35	0.62	0.89
Haryana	Total Hrs. Devoted to teaching	1334.7	99.13	1199.5	254.8	1248.6	117.2	1256.1	180.01	3.15	0.37
	Time for Discussion with Pupil	19.85	12.88	19 92	10.67	22.29	14.37	22.74	12.63	0.52	0.91
	Time for Group Learning	21.05	11.87	14.37	6 38	15.02	6.80	13.97	6.05	3.32	0.34
	Time for Practice	11.70	5.13	17.19	5.55	14.34	5.42	14.04	6.09	5.61	0.13
	Time for Home Work	14 62	3.70	12.89	6.73	13.11	6.74	14.16	6.41	2 78	0.43
Kerala	Total Hrs. Devoted to teaching	N A	N.A	N.A	N.A	939.7	81 7	897.3	49.5	1 05	0.30
	Time for Discussion with Pupil	N.A	N.A	N A	N.A	36.57	4.28	38.07	9.79	0.09	0.76
	Time for Group Learning	N.A	N A	N A	N A	16.64	6.61	10.81	4.21	2.19	0.14
	Time for Practice	N.A	N.A	N.A	N A	9.15	3.45	13.39	4.40	1.94	0.16
	Time for Home Work	N.A	N.A	N.A	N A	11.36	3 25	9.88	3.43	0.61	0.43

Table 12: Instructional Time — Mean, SD and Significane Level

Table 12: Instructional Time

State	Items	High conc.		Average Conc.		Low Conc.		No SC		Chi-Square	P-Value
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S D		
Maha-rashtra	Total Hrs. Devoted to teaching	1520.0	226.3	1331.6	280.4	1193.3	193.2	1226.5	310.8	4.10	0.25
	Time for Discussion with Pupil	22.48	1.48	32.63	14.92	30.65	13.33	28.62	14.08	1.14	0.76
	Time for Group Learning	10.36	2.18	10.60	3.30	11.24	8.35	10.35	6.97	0.01	0.93
	Time for Practice	17.72	8.22	12.25	3.52	14.69	5.28	15.01	5.52	2.32	0.51
	Time for Home Work	11.83	0.09	10.11	2.88	12.93	5.47	14.40	8.08	3.81	0.28
Orissa	Total Hrs. Devoted to teaching	1177.1	169.3	1123.3	170.4	1063.7	184.8	1068.1	170.7	4.90	0.18
	Time for Discussion with Pupil	36.88	15.29	57.09	16.06	47.82	18.29	49.91	15.26	6.19	0.10
	Time for Group Learning	6.37	4.07	5.39	3.72	6.12	5.28	4.68	4.54	3.68	0.29
	Time for Practice	11.81	3.54	8.34	4.54	10.61	5.85	10.43	5.99	2.56	0.46
	Time for Home Work	9.34	5.87	6.83	4.43	10.26	5.83	8.69	4.22	3.68	0.29
Tamil-nadu	Total Hrs. Devoted to teaching	1081.6	51.85	1100	·00	1053.8	77.86	1079.9	41.78	1.31	0.72
	Time for Discussion with Pupil	50.47	14.03	33.33	3.59	38.09	16.55	36.10	7.98	3.65	0.30
	Time for Group Learning	6.64	9.40	11.45	2.64	8.81	4.87	10.85	4.21	2.11	0.55
	Time for Practice	13.68	2.67	14 87	2 31	13.51	2.94	13.73	4.39	1.54	0.67
	Time for Home Work	7.67	3.53	14.21	2.52	12.97	5.57	11 66	2.48	6.75	0.08

18

Use of Textbooks

Table 13 provides results about the use of textbooks in the classroom. The data has been taken from the teachers schedule and aggregated at the school level on the basis of percentage of teachers who use the textbook in different ways in the classroom for variety of purposes. These are teacher explaining from the textbook, child reading aloud, self reading by the child and giving homework from the textbook. The results were not statistically significant for any of the states. Only paired comparison test result (M-W U test) revealed significant difference in case of home work given from textbook. In Maharashtra, teachers of schools with average concentration of SC students provided less home work from the book(Z=-2.31, P<.02) in comparison to schools of no SC group. In Haryana, the text book was not used frequently for home work purpose in the schools with high concentration of SC students (Z=-2.59, P<.01).

<table>
<tr><th colspan="12">Table 13: Textbooks Use</th></tr>
<tr><th rowspan="3">State</th><th rowspan="3">Items</th><th colspan="8">Mean, SD and Significane Level</th><th rowspan="3">Chi-Square</th><th rowspan="3">P-Value</th></tr>
<tr><th colspan="2">High conc.</th><th colspan="2">Average Conc.</th><th colspan="2">Low Conc.</th><th colspan="2">No SC</th></tr>
<tr><th>Mean</th><th>S.D</th><th>Mean</th><th>S.D</th><th>Mean</th><th>S.D</th><th>Mean</th><th>S.D</th></tr>
<tr><td rowspan="4">Assam</td><td>Teacher Read Textbook</td><td>100</td><td>00</td><td>93.75</td><td>12.50</td><td>94.28</td><td>15.12</td><td>98.62</td><td>6.83</td><td>4.30</td><td>0.23</td></tr>
<tr><td>Child Read Aloud</td><td>100</td><td>00</td><td>81.25</td><td>37.50</td><td>94.28</td><td>9.76</td><td>94.78</td><td>15.87</td><td>1.86</td><td>0.60</td></tr>
<tr><td>Child Self Read</td><td>100</td><td>00</td><td>87.50</td><td>25.0</td><td>86.67</td><td>17.64</td><td>85.29</td><td>31.33</td><td>1.66</td><td>0.64</td></tr>
<tr><td>Textbook Homework</td><td>100</td><td>00</td><td>93.75</td><td>12.50</td><td>97.14</td><td>7.55</td><td>97.62</td><td>10.52</td><td>2.25</td><td>0.52</td></tr>
<tr><td rowspan="4">Haryana</td><td>Teacher Read Textbook</td><td>86.66</td><td>29.81</td><td>96.66</td><td>8.79</td><td>96.02</td><td>11.03</td><td>96.89</td><td>9.59</td><td>0.70</td><td>0.87</td></tr>
<tr><td>Child Read Aloud</td><td>100</td><td>00</td><td>87.67</td><td>19.54</td><td>95.98</td><td>13.15</td><td>92.57</td><td>20.97</td><td>5.06</td><td>0.17</td></tr>
<tr><td>Child Self Read</td><td>93.33</td><td>14.91</td><td>85.00</td><td>35.10</td><td>91.21</td><td>19.89</td><td>96.46</td><td>13.64</td><td>4.28</td><td>0.23</td></tr>
<tr><td>Textbook Homework</td><td>86.67</td><td>29.81</td><td>100</td><td>00</td><td>98.41</td><td>8.05</td><td>99.73</td><td>2.32</td><td>6.92</td><td>0.07</td></tr>
<tr><td rowspan="4">Kerala</td><td>Teacher Read Textbook</td><td>N.A</td><td>N.A</td><td>N.A</td><td>N.A</td><td>100</td><td>00</td><td>78.99</td><td>19.67</td><td>2.48</td><td>0.11</td></tr>
<tr><td>Child Read Aloud</td><td>N.A</td><td>N.A</td><td>N.A</td><td>N.A</td><td>100</td><td>00</td><td>82.79</td><td>19.19</td><td>1.97</td><td>0.16</td></tr>
<tr><td>Child Self Read</td><td>N.A</td><td>N.A</td><td>N.A</td><td>N.A</td><td>83.33</td><td>23.57</td><td>84.77</td><td>19.39</td><td>0.04</td><td>0.84</td></tr>
<tr><td>Textbook Homework</td><td>N.A</td><td>N.A</td><td>N.A</td><td>N.A</td><td>83.33</td><td>23.57</td><td>91.20</td><td>13.15</td><td>0.59</td><td>0.43</td></tr>
</table>

State	Items	High conc.		Average Conc.		Low Conc.		No SC		Chi-Square	P-Value
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D		
Madhya Pradesh	Teacher Read Textbook	100	00	98.55	6.95	96.26	15.89	96.40	14.25	1.24	0.74
	Child Read Aloud	100	00	94.56	21.26	97.34	11.15	94.90	17.62	2.95	0.39
	Child Self Read	94.44	16.66	97.46	8.49	93.03	20.72	94.64	17.87	0.87	0.83
	Textbook Homework	100	00	97.83	10.42	98.13	10.94	97.60	12.09	1.01	0.79
Maha-rashtra	Teacher Read Textbook	100	00	92.50	21.21	98.27	9.28	99.02	4.50	1.39	0.70
	Child Read Aloud	100	00	73.33	36.89	89.31	21.07	91.47	19.98	4.58	0.20
	Child Self Read	50.0	70.71	86.87	28.40	91.61	23.27	95.06	13.33	3.53	0.32
	Textbook Homework	100	00	83.12	25.20	97.01	9.19	95.95	14.32	6.09	0.11
Orissa	Teacher Read Textbook	100	00	100	00	97.90	7.18	99.47	3.23	3.37	0.34
	Child Read Aloud	100	00	96.29	11.11	92.71	15.97	92.27	20.97	1.93	0.59
	Child Self Read	85.71	37.79	97.22	8.33	98.0	6.66	93.91	17.59	1.13	0.77
	Textbook Homework	100	00	100	00	95.62	13.10	98.09	10.98	3.56	0.31
Tamil Nadu	Teacher Read Textbook	100	00	100	00	100	00	100	00	--	--
	Child Read Aloud	100	00	100	00	95.10	8.53	98.96	2.89	2.66	0.44
	Child Self Read	100	00	100	00	88.90	15.01	95.70	7.27	4.57	0.20
	Textbook Homework	100	00	100	00	100	00	99.77	1.22	0.43	0.93

Table 13: Textbooks Use

Mean, SD and Significane Level

Home work

This variable is based on the teachers' response about frequently giving homework to the students. There was no significant difference among four groups on this variable as indicated in Table 14. Therefore it can be inferred that homework is a common practice in the school irrespective of high, average and low concentration of SC students.

State	Items	High conc		Average Conc		Low Conc		No SC		Chi-Square	P-Value
		Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D		
Assam	Home Work Given	52.77	41.10	75.00	50.00	58.57	33.77	60.42	38.40	1.21	0.75
Haryana	Home Work Given	93.33	14.91	98.67	5.16	93.03	22.04	96.94	13.20	1.82	0.61
Kerala	Home Work Given	N.A	N.A	N.A	N.A	83.33	23.57	71.98	24.85	0.29	0.59
Madhya Pradesh	Home Work Given	88.89	33.33	86.95	26.45	79.04	33.12	81.32	32.93	2.98	0.39
Maha-rashtra	Home Work Given	50.00	70.71	72.08	35.81	87.93	19.67	83.98	25.75	2.00	0.57
Orissa	Home Work Given	71.43	39.33	86.67	21.79	70.57	34.04	63.82	33.45	5.25	0.15
Tamil-nadu	Home Work Given	100	00	97.73	4.54	96.12	7.59	94.72	10.16	1.26	0.74

Table 14: Home Work — Mean and Standard Deviation

School Health

Table 15 represents the percentage of school having provision of school health facilities like first aids kits, health checkup and immunization. The results of these variables were not statistically significant in any of the state.

State	Health Facility	Percentage of Schools Having the Facility				Chi-Square	P-Value
		High Conc.	Average Conc.	Low Conc	No ST		
Assam	First Aid Kits	00	00	00	1.9	1.07	0.78
	Health Checkup	22.2	30.0	11.1	12.5	3.64	0.30
	Immunization	13.9	30.0	11.1	14.4	1.92	0.59
Kerala	First Aid Kits	N.A	25	40	25.3	1.02	0.60
	Health Checkup	N.A	25	10.0	34.3	2.57	0.27
	Immunization	N.A	50.0	10.0	27.3	2.56	0.28
Madhya Pradesh	First Aid Kits	5.8	3.4	12.2	11.4	5.50	0.14
	Health Checkup	68.1	77.6	81.1	71.3	5.18	0.16
	Immunization	31.9	43.1	50.0	47.3	6.70	0.08
Maharashtra	First Aid Kits	00	00	00	21.3	4.69	0.19
	Health Checkup	50	66.7	63.6	70.4	0.93	0.82
	Immunization	50	33.3	54.5	65.7	2.11	0.55
Orissa	First Aid Kits	6.9	4.0	9.4	6.4	0.67	0.88
	Health Checkup	34.5	12.0	37.5	44.9	8.89	0.03*
	Immunization	41.4	40.0	56.3	69.2	10.62	0.01**
Tamil Nadu	First Aid Kits	16.7	50.0	00	24.0	1.24	0.74
	Health Checkup	83.3	100	00	95.2	16.75	.001**
	Immunization	50.0	100	00	66.3	3.62	0.30

Synoptic View

The present study focuses on the input differences among four groups of schools categorized on the basis of concentration of SC students. Results indicate that some of the inputs differ significantly. This observation is meaningful for intervention purpose. Table 16 gives an account of the input variables under consideration.

Table -16: Summary of Input Variables Required Intervention					
STATE	INPUT VARIABLES	High	Average	Low	No SC
ASSAM	Pucca Building	X	X	-	-
	Toilet Facility	X	X	-	-
	Preschool Facility	X	-	-	-
HARYANA	Teacher Attendance	-	X	-	-
	Home Work on TextBook	X	-	-	-
MADHY PRADESH	Teacher Pupil Ratio	X	-	-	-
MAHA-RASHTRA	Instructional Aids	-	X	-	-
	Trained Teachers	-	X	-	-
	Experienced Teachers	X	-	-	-
	Teacher Pupil Ratio	-	X	-	-
	Home Work on TextBook	-	X	-	-
ORISSA	Pucca Building	X	X	-	-
	Experienced Teachers	X	-	-	-
TAMILNAD	Instructional Aids	X	-	-	-

IMPLICATION FOR DPEP INTERVENTION

The major objective of the present study was to find out school input differences among four groups of school having different level of SC students concentration. Being a weaker section of the society, enormous efforts are made by the govt for their upliftment. Due to the affirmative polices of the government significant improvement have been marked in all the spheres. But there is a long way to go specially to reach at the destination of equal educational opportunity and equal access. The micro analysis of baseline data was not marked with a common trend of input deficits. Those are confined to a particular state. For the intervention point of view, those areas are of major concern for policy makers and planners in the field of education. The result emerging from this study are discussed according to the deficits observed at the state level.

ASSAM

The schools of high and average concentration category are lacking on pucca building and toilet facilities in this state. Specially when these provisions are available in the OB scheme, necessary steps may be undertaken to extend this scheme or provision to be made in the district plan to overcome these deficits in the schools of average concentration category The schools with high concentration of SC students had no preschool facilities which indicates an early deprivation of enriching experience. To make the disadvantage more functional at primary stage, preschool facility may be provided through ECCE, ICDS and other NGO's.

HARYANA

The input variables require attention in the state of Haryana are related to teacher attendance and use of textbook. It is a matter of concern for the head teacher or education authority in that area.

ORISSA

From the physical facility point of vies school of high and average concentration of SC students lack pucca or semi pucca building. Necessary plan may be made after examining the enrollment status of those schools. Another significant result obtained in terms of teacher experience indicates that teachers of high concentration category has less experienced teacher. It may be because of newly appointed teachers. For the effectiveness of school functioning, their competency can be enhanced through inservice training programme.

MAHARASHTRA

Teacher training is required to equip these schools with more trained teachers. Inservice training will be helpful in providing competency in recent teaching technology to teachers working in schools with high concentration category. Further, high teacher pupil ratio is a matter of concern in these school. Suitable guidelines may be envisaged in the district plan for this purpose.

TAMILNADU

In Tamilnadu, schools of high concentration category has less instructional aids. It may be because of less percentage of schools covered under OB scheme in comparison to other three categories. Either OB scheme should be extended to these school or provision should be made in the district plan for the purpose of supplying instructional aids.

MADHY PRADESH

High teacher pupil ratio was observed only in the schools of high concentration category Considering the individual school need, extra teacher may be supplied to those school or teacher should be trained on the effective management of multigrade teaching.

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ANNEXURE - 1

STATE	DISTRICT	SC POPULATION	TOTAL POPULATION	% OF SC
Assam	Darrang	64350	1298860	4.95
	Dhubri	64161	1332475	4.81
	Mariagaon	88136	639682	17.78
	Karbianglong	27991	662723	4.22
Haryana	Hissar	428072	1844634	23.21
	Jind	188409	363104	19.56
	Kaithal	175977	820685	21.27
	Sirsa	240793	903536	26.65
Kerala	Kasargod	81970	1071508	7.65
	Wayanad	27835	672128	4.14
	Malapuram	255731	3096330	8.26
Madhy Pradesh	Betul	127438	1181501	10.79
	Dhar	94895	1367412	6.94
	Guna	236903	1310317	18.08
	Mandsor	246631	1555208	15.86
	Rajgarh	178714	992764	18.00
	Raisen	145095	876461	16.55
	Ratlam	133376	971888	13.72

STATE	DISTRICT	SC POPULATION	TOTAL POPULATION	% OF SC
Madhya Pradesh	Sihore	170796	841358	20.30
	Chhatarpur	274438	1158076	23.70
	Panna	140374	687945	20.40
	Rewa	229915	1554987	14.78
	Satna	261505	1465384	17.84
	Sidhi	156157	1373434	11.37
	Tikamgarh	214064	940829	22.75
	Bilaspur	687221	3793566	18.12
	Raigarh	195913	1722291	11.37
	Rajnandgaon	148018	1439951	10.28
	Sarguja	114832	2082630	5.51
	Shaddol	134295	1743869	7.70
Maharashtra	Nanded	422942	2330374	18.15
	Aurangabad	305246	2213779	13.79
	Parbhani	233323	2117035	11.02
Orissa	Gajapati	N A	N.A	N.A
	Kalahandi	253832	1600385	15.86
	Raigarh	N A	N A	N.A
	Phulbani	N A	N.A	N.A
Tamilnadu	Dharampuri	347460	2428596	14.31
	South Arcot	1323299	4878433	27.12
	Tiruvannmalai	438390	2042979	21.46